

DRINKING WATER STATE REVOLVING FUND

Capacity Development Review Checklist

City/UD, DWSRF No. xxxx-xxx

Project Description: xxxxxxxxxxxxxxxxx

Water system capacity: The technical, managerial, and financial ability to plan for, achieve, and maintain compliance with applicable drinking water standards.

Water system capacity development: The process of water systems acquiring and maintaining adequate technical, managerial, and financial capabilities to enable them to consistently provide safe drinking water.

Statutory authority: Safe Drinking Water Act, Section 1420

Reviewer(s): Xxxx Xxxx, P.E., Technical/Managerial; Xxxx Xxxx, Financial

Date: Month Day, Year

Sanitary Survey Scores	Year: <u>xxxx</u>	Score: <u>xx</u>
	Year: <u>xxxx</u>	Score: <u>xx</u>
	Year: <u>xxxx</u>	Score: <u>xx</u>

TECHNICAL

I. SOURCE AND FACILITY (Sections refer to Sanitary Survey Sections)

A. Adequate Supply (Design Criteria 3.1.1b—ten to twenty year supply)

1. What is the population served? _____
2. What is the predicted growth rate over the next 20 years? _____
3. What is the plant capacity? _____
4. What is peak daily demand? _____
5. What is average daily demand? _____
6. Have shortages been experienced? _____
7. Does the system have a demand forecast? _____
8. Are the long-term water demands of large users known? _____
9. Have losses been included in the demand forecast? _____
10. What alternative water sources are available? _____

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B. Duplicate Pumps ((for community water systems serving at least 50 connections) (TDEC Rule 1200-5-1-.17(13)))

1. Are there duplicate pumps at the source? _____
2. Are there adequate parts for maintenance? _____

C. Protection Against Contamination (Design Criteria 3.1.2)

- | | <u>Little</u> | <u>Moderate</u> | <u>A Lot</u> |
|---|---------------|-----------------|--------------|
| 1. What effect do other activities or potential sources of contamination in the watershed or wellhead area have on the Water Treatment Plant? | _____ | _____ | _____ |

(If the answer to this question is "moderate" or a "lot," please answer the following questions 2-6.)

2. Is contamination a current or potential problem? _____
3. Are disinfection by-products an existing or potential future problem? _____
4. Are natural geologic contaminants an existing or potential future problem? _____
5. Are agricultural chemicals an existing or potential future problem? _____
6. Is industrial/commercial contamination an existing or potential future problem? _____
7. Does the system have a regular sampling and testing program in place? _____

D. Well Head Protection Program (If applicable, please list.)

1. Sanitary Survey Deficiencies _____
2. Corrective Action Plan _____

E-W. Plant and Equipment (If applicable, please list.)

1. Sanitary Survey Deficiencies _____
2. Corrective Action Plan _____

X. Design Capacity (Filtration and Disinfection) (If applicable, please list.)

1. Deficiencies Listed? _____
2. Corrective Action? _____

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TECHNICAL

II. OPERATION

A. Are there certified operators at the Plant?

{Criteria for operators—plant size, # of operators required, etc.}

B. Are there certified operators for the distribution system?

{Criteria for operators—plant size, # of operators required, etc.}

C. Were there any Sanitary Survey deficiencies?

(Refers to Section II of the Sanitary Survey)

D. Is the operational budget adequate?

E. Are parts and supplies available?

F. How are operational needs communicated to management?

G. How do operators keep up with regulatory changes?

H. How are violations handled?

I. Is there an equipment maintenance program that effectively prevents breakdowns in the plant and distribution system?

J. Are records kept updated?

K. Has the plant established an Emergency Management Plan?

III. WATER QUALITY AND WATER QUALITY MONITORING

A. Are there deficiencies listed in survey?

B. What corrective actions are planned?

C. Surface Water— Is the record free of any waterborne disease outbreaks or boil notices?

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D. Ground Water—

1. Has there been any contamination of the ground water? _____
2. Does the water become cloudy or turbid after storms? _____
3. Is a chlorine residual maintained in the distribution system? _____

E. Distribution Systems—

1. Are there any compliance problems with the coliform standard? _____
2. Are there any taste and odor complaints? _____

F. Are corrosion by-products an existing or potential future problem? _____

G. Are there any pH and alkalinity problems in the treated water? _____

H. Are there any lead or copper test problems? _____

I. Is there a monitoring schedule in place? _____

IV. DISTRIBUTION AND CROSS CONNECTION

A. Is the water system infrastructure in good condition? _____

B. Is the chlorine residual maintained? _____

C. Is there a cross connection policy in place? _____

D. Storage—

1. Does the system have adequate storage capacity? _____

(For systems having at least 50 connections, adequate storage capacity constitutes 24 hours of distribution storage based on average daily demand calculated over the last 12 months.

If a system is 10 MGD or greater, the system must meet the 24-hour criterion or have a TDEC-approved Emergency Plan.)

2. Are the tanks adequately maintained? _____

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- E. Are there obsolete materials in the piping of the system? _____
(What materials are in the pipe system?)
- F. Distribution system—
1. Is there a problem with adequate pressure? _____
 2. Are the meters tested/replaced on a predetermined basis? _____
 3. What is the leakage rate? _____
 4. Are the lines of adequate size? _____
 5. Are the lines flushed regularly? _____
 6. What are the rates of leaks and repairs? _____
- G. Are deficiencies listed? _____
- H. Is the distribution system map current? _____

MANAGERIAL

V. MANAGEMENT

- A. Is the water system adequately managed? _____
- B. Who is in charge? _____
- C. Are roles and responsibilities clearly defined? _____
- D. Are the lines of communication open? _____
(Between employees and managers)
- E. Who oversees contractors and engineers? _____
- F. Does management support operations? _____
- G. What policies and procedures are in place for the following?
1. Water Quality _____
 2. Safety _____
- H. Projected water usage
1. What will the water usage be in 5 years? _____
 2. What will the water usage be in 10 years? _____
- I. Who will implement new regulations? _____

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MANAGERIAL

- J. Is there adequate legal, financial, and engineering consultation available to the management? _____
- K. How are qualified operators and engineers selected? _____

VI. CUSTOMER RELATIONSHIPS

- A. What policies and procedures are in place regarding customer relationships? _____
- B. How do customers receive news and information about the water system? _____
- C. How are customer complaints handled? _____
1. What types of complaints are common? _____
2. Is a complaint log maintained? _____
- D. How are customers notified of rate increases? _____
- E. Are public tours provided for special groups? _____

FINANCIAL

VII. FINANCIAL

- A. Is the water system financially healthy? _____
1. What is the net income or loss so far this year? _____
2. What was the net income or loss last year? _____
3. What was the net income or loss the year before last year? _____
4. What were net assets last year? _____
5. Is the opinion of the independent auditor's report unqualified, qualified, disclaimer, or adverse? _____
6. If not unqualified, does the problem have any financial impact on the water system? _____
- B. Can the water system revenues absorb additional debt? _____
1. What was the water depreciation expense last year? _____

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FINANCIAL

VII. FINANCIAL

2. What was the debt principal repayment last year? _____
3. What was the debt interest expense last year? _____
4. From the balance sheet, what were the total liabilities last year? _____
5. From the balance sheet, what was the total equity last year? _____
6. What is the debt coverage ratio?
$$\frac{\text{Net income} + \text{Debt principal and interest}}{\text{Debt principal and interest}}$$

7. From the balance sheet, what were the total assets last year? _____

Yes No

- C. Is there additional revenue needed this year to meet operating expenses? _____
1. Is there an adequate number of personnel to run the office? _____
 2. Are the personnel adequately trained to run the office? _____
 3. Is there an operating budget for this year? _____
- D. Is additional revenue needed this year to meet future expenses? _____
1. Is the capital improvements budget balanced for this year? _____
 2. When was the last rate increase? _____
 3. How much was the last rate increase? _____
 4. How many readings are required for a rate increase? _____
 5. Is a rate increase needed now for planned capital projects? _____
 6. Is there any financial problem or shortcoming facing the water utility today? _____
- If yes, please explain. _____

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Attendance List

Day, Date
Date

Time
Time

<i><u>Name (Please Print)</u></i>	<i><u>Representing</u></i>	<i><u>E-mail</u></i>	<i><u>Telephone Number</u></i>